Boston's Contribution to the Fleet of Vacuum Airships.

USES FOR ARTIFICIAL STONE. Pigments Which Resist Corrosion by Air or Sea Water.

SCIENTIFIC AND INDUSTRIAL NOTES

IWHITTEN FOR THE DISPATCH.

Readers of THE DISPATCH who desire information on subjects relating to industrial development and progress in mechanical, civil and electrical engineering and the sciences can have their queries auswered through this column.

News comes from Boston that under the auspices of the Aerial Exhibition Association a steel airship is about to be constructed upon the vacuum principle. The ship is to be constructed entirely of thin plates of the greatest possible tensile strength and thoroughly braced inside by a "new development in science mechanics" to resist the pressure of the atmosphere when a partial vacuum is obtained. The promoters of the enterprise expect their machine to lift 200 passengers and 50 tons of mail or other matter, to say nothing of all the machinery and apparatus, with electrical power sufficient to give a speed to the ship of at least 70 miles an hour. During the earlier trips no intermediate or steerage passengers will be taken. The cost is estimated at \$250,000, and a national subscription is to be opened for the purpose of securing the necessary funds. Dr. De Bossuct, the inventor, is said to claim that his plans have had the approval of "the most emment scientific and engineering experts in the country." There is no doubt that acrial navigation will sooner or later become an accomplished fact, but it is very much open to question whether either the auto-mobile balloon or the vacuum shell will be the succes-ful airship of the future, but rather, so far as we can judge at present, a self-sustaining machine, or a motor driven by electricity derived from the surface of the earth. It seems as if inventors never would be convinced of the futility of the never would be convinced of the futility of the dirigible balloon, of which the unfortunate termination of the Campbell venture has just afforded another example. They are misled by the case with which the machine can be handled in a dead calm, and will not realize that in a breeze it becomes comparatively powerless.

Artificial Stone.

Several kinds of artificial stone have come Into use during the last 25 years for architectural and artistic purposes, and for the pave-ment of cellars, for footpaths, areas, etc. Some of them possess very considerable merit, and are of great value in districts where durable and cheap building stone is not supplied by and cheap building stone is not supplied by nature. One of the most valuable of these is the McMurtrie stone, the process for making which is patented. It consists essentially of Portland stone, or Portland coment and sand or gravel, compacted into form by tamping, in the pores of which are formed compounds of alumina of the fatty acids by the double composition of alum and a potash soap. These compounds are insoluble in water, are not acted upon by the carbonic acid of the air, and add considerable to the early strength of the stone and somewhat to its ultimate strength. The peculiar merit of this stone is that its power and somewhat to its ultimate strength. The peculiar merit of this stone is that its power of absorbing water is decreased by the use of the alum and the soap. All mortars and most of the artificial stones absorb water freely-porous mortar from 50 to 60 per cent-and consequently they disintegrate rapidly under the action of frost. The absorbed water also dis-solves the salts of magnesia, lime, soda and potash (of all of which there is always more or less in cement), and evaporation leaves a white efforesence on the surface, which injures the appearance of the wall. For these reasons the ordinary artificial stones are in disrepute for architectural purposes. The absorptive power of the McMurtrie stone is about twice that of granite, about equal to that of limestones, and about one-tenth, or less, of the best sandstones. al stone vary directly with the artificial stone vary directly with the hy-strength and hardness attainable by the hy-draulic ingredients employed. An obvious means of improving their quality, therefore, is

Enumeration of the Deaf. Certain suggestions have just been made by

Dr. A. Graham Bell on the census-taking of the deaf, which may lead to important results in the study of the heredity of this affection, and to its introduction into certain families through unfortunate marriages. This is a point of grave importance, and one upon point of grave importance, and one upon which, up to this time, no special data have been obtained in this country. A meeting of the Executive Committee of the conference of American instructors of the deaf was held in Washington in May of this year to consider the best method of counterating the deaf of the next census, and among the recommendations that were then formulated for presentation to the committee in charge of the mortality and vital statistics of the "eleventh census" was the following: "An impression is prevalent that deafness, blindness, diocy and insanity are often due to consanguinity in the parents; and statistics have been collected which show that a considerable percentage of the deaf, blind, idiotic and insane are the children of first cousins. These statistics, however, can be of little use in determining the questions involved until we know what percentage of the general population are the off-spring of such unions. We therefore reccommend that in Section No. 1 of the census the question be asked, "Were the parents of this person first cousins."

amarized Description of the Vesuvius. The following details of this vessel were lately given by Captain E. L. Zalinski, United States Army: She is equipped with three 15inch pneumatic dynamite guns, placed at a fixed angle of 18°, all parallel with the keel and abreast of each other, pointing forward.

The guns are trained by steering the vessel, while ranges are altered by varying the air pressure. As the vessel is provided with twin formed. Three caliber of shell will be used— Sinch and li-inch sub-calibers and li-inch full caliber. The ranges will be 2 miles, 1% miles, and 1.500 yards. The rate of fire will be once per minute from each gun, or practically three rounds per minute. Thirty-three rounds can be so carried as to maintain the maximum rate be so carried as to maintain the maximum rate of fire until these are expended. Comparisons of the Vesuvius with the ligin, Tripoli, Destructor, Sharpshooter, Rattlesnake and Bombe show that she can discharge more than three times as much explosive than that carried by the largest of these vessels to more than five times the effective range, and in about one-half the time required where seven torpedo tubes are used. The Vesuvius has a speed of wore than 20 knots.

Anti-Corrosive Pigments. An interesting series of experiments has been conducted by the Dutch State railways for the purpose of ascertaining exactly the relative resistance of various pigments to atmospheric changes and to the corrosive action of sea water. The results have proved that the red lead paints are less affected by almospheric influence than those that are composed of the brown oxides of iron, on account of their adhering more closely to the metal and of their possession of greater elasticity, it was also discovered that any sort of paint afforded an increased protection if the piates were pickled in hydrochloric acid before its application. The prevention of corrosion by sait water was found to be possible by the admixture of the oxide of some electro-positive metal, such as caustic lime and soda, but the efficiency of such a covering was destroyed when its alkaline properties had been neutralized by the absorption of carbonic acid. Magnesia, however, was proved to be most serviceable, seeing that it does not absorb carbonic acid, and not only does it protect the iron from galvanic action, but it also does not affect the auti-fouling qualities of the paint.

Bersee Rubber.

The relative value of the rubber fields of the world has lately been discussed, and prominent among these is Borneo. Borneo rubber is the product of two, if not more, species of plants of the genus Willoughbeia, a creeper which obtains a length of 150 feet, or thereabouts, and grows wild and untended in the forests; the rubber is simply its hardened sap, which five received the subject of the work is raw and crude; the deficiency of the defails of their geological formation, while the distant mountain peaks lack, both firmness and delicacy in the drawing. In adjoint the work is raw and crude; the world has lately been discussed, and prominent among these is Borneo. Borneo rubber is the product of two, if not more, species of plants of the genus Willoughbeia, a creeper which obtains a length of 150 feet, or thereabouts, and grows wild and untended in the forests; the rubber is simply its hardened sap, which for the purpose of ascertaining exactly the

and grows wild and untended in the forests; the rubber is simply its hardened sap, which flows freely from the stem if wounded. To ob-tain it rings are cheselled in the hark, at inter-vals of about 14 or 15 inches apart. As such as half a humired weight of righter is occision-ally obtained from a very old creeper, but the as half a hundred weight of rubber is ecclaionally obtained from a very old creeper, but the senal quantity may be put down at about half that. The plant is necessarily killed in the operation. It is not yet clearly ascertained at what age it is best to take the rubber, though six years is the time usually spoken of. Only the very slightest attention has been required

for any of these plants, and these is no reason why the cultivation should not be indefinitely

Utilization of the Artesian Well. The artesian well is becoming quite common in many parts of Australia, and is meeting with great success. Large areas of land, which hav been hitherto useless for pastoral purposes owing to scanty rainfall, are being opened u owing to scanty rainfall, are being opened up through the help of this form of water supply. The official geologist to New South Wales has just prepared a map, showing the districts where artesian wells may be bored with profitable success. It appears that there are 60,000 square miles of arid land which stand over water-bearing formations, and which could easily obtain the necessary water supply to convert them into valuable grazing tracts. From some facts lately published by the Government of Victoria, it appears that there are at present ten irrigation and water supply trusts in that colony, and that these have 700,000 acres under cultivation at present. It is also stated that negotiations are on foot for the appropriation of a further 500,000 acres.

Artificial Whalebone. In many branches of industry it has of lat In many branches of industry it has of late been found necessary to supersede natural by artificial products. The supply of whalebone has for some time been gradually diminishing, and now an artificial whalebone has been produced, which is said to be a perfect substitute. It can be produced very cheapity, as the process of its manufacture is a simple one. One part of seaked and softened india rubber, one-fourth part of sheliac, one-fifth part of magnesia, and one-fourth part of gold brimstone are mixed together. They are then heated in an oven at 120 to 150 degrees Colsius, and the material is ready for the market.

Utilization of Running Streams. The utilization of many running streams i The utilization of many running streams is the subject of many recent devices, among which may be mentioned that of M. Tayn, a Russian engineer. His apparatus consists of an endless cable, carrying a series of canvas cones, which open and shut like an umbrella. The cable passes over a double drum on board a pontoon, and at the other end over a pulley suspended from a buoy. On the lower part of the rope the cones are opened and forced torward by the current of water, thus setting in motion a shaft or drum.

The Eiffel Tower Light. The electric beam from the Eiffel Tower lan-tern has a luminous intensity of about 55,000 candles. Catadioptric rings are arranged to make the light stronger as it travels from the tower, so that in clear weather its range—if not limited by the earth's curvature—should be 127 miles, with an intensity of 5,000,000 candles. It has yet to be seen, however, whether thi theory will be confirmed by practical tests.

ART NEWS AND GOSSIP.

A PORTRAIT in oil of a young lady, painted by Mr. Charles Walz, is on exhibition Young's. A STUDY of a basket of pansies, the work of

Miss McElroy, has been shown at Young's during the week. MR. GEORGE HETZEL was in the city last week, he having determined to pay another visit to Cowanshannoc, with a view of spend-ing the remainder of the season there in case he can secure suitable accommodations, failing which he will return to the Connoquenessing.

THE exhibition of a picture painted several years ago by Mr. Martin B. Leisser recalls a name that was at one time very familiar in Pittsburg art circles. The work referred to is a painting of a handsome vase of flowers of vari-ous kinds, which the artist executed a short time before leaving this city. Mr. D. B. WALKLEY is working very indus-

triously at his glasshouse interior, which he desires to complete so far as concerns the drawing of the building and the pose of the figures while the works are still shutdown, so that when work is resumed in September he will be free to study the effects of firelight and the real spirit of the scene. He leaves during the week for Ohio, where he intends to make some out of door studies. THE fact that two studies by Mr. G. T.

Hetzel were shown in a Wood street art store about a week ago with cards upon them marked "Hetzel, artist," was due to an over marked "Hetzel, artist," was due to an over-sight on the part of the young man who placed them in the window, and who failed to fully ap-preciate the distinction between the two Het-zels. The pictures had been left by their pres-ent owner to be framed, and the first intima-tion the younger Mr. Hetzel had that they were so exhibited was when he read the notice of them in last Sunday's DISPATCH, after which he lost no time in having the mistake corrected. ONE hundred years ago, 50 years ago, 25 years

ago. Any one looking backward for even the last mentioned comparatively short period of time, and contrasting the appearance of the time, and contrasting the appearance of the office furniture then used with that of the present day, must be strongly impressed with the encroachments made by decorative art upon the domain of the most pressic business affairs. It is not so long since any description of furniture that could be made to answer the purpose was held to be good enough for office use, no matter how old, worn and unsightly it night be. Now all this is changed, and a first-class office is a luxurious apartment indeed. Office furniture is now demanded of the latest patterns and most substantial workmanship: it must be artistically designed and elegantly finished. Brussels or other expensive carpets cover the floor and fine curtains depend from polished poles of hard wood, while higher art in the form of pictures adorns the walls. All this is just as it should be, and the increasing regard for the beautiful is a good and healthy sign. The fact that men object to spending a great portion of their time surrounded by objects disagreeable to the eye and irritating in their ugliness is a positive evidence of progress in culture and artistic feeling. Progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in any characteristic feeling. Progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in any direction is not to be despised, and progress in culture and artistic feeling. Progress in any direction is not to be despised, and progress in any direction is not to be despised and progress in any direction is not to be despised and progress in any direction is not to be despised and progress in any direction is not to

THE Gillespie gallery contains three notable works by foreign artists, but which are now the property of a prominent business man of this city. Ch. Moreau, G. Jacquet and Ridgway Knight are the names of the artists, of which the latter at least is well known in Pittsburg. The picture by Moreau is a rather uninterest-The picture by Moreau is a rather uninteresting work, representing an Old World peasant family at lunch. Technically, the picture has some good points about it, but on the whole it has a bare and incomplete appearance. The subject of Jacquets, picture is the head and bust of a young girl, and it is a pleasant, well painted work, with no reason whatever for its existence except to serve as a very pretty piece of decoration. Nevertheless, it is of a class of work that has a place in art, and this picture fits into its place and fills it well, for the reason that it is cleverly handled, in a straightforward and free style of execution, of good color, particularly in the flesh tints, a complete work in its way, and, as such, deserving of notice. The picture by Ridgway Knight is the best and most important of the three, since it is at once the largest work and painted with the greatest degree of artistic feeling. The subject is a young shepherdess standing and watching a flock of sheep grazing nearby. The sheep and landscape are merely indicated, and that is all that need be said of this portion of the picture, which simply supplies a background to the figure of the young indicated, and that is all that need be said or this portion of the picture, which simply sup-plies a background to the figure of the young girl, wherein all the interest is centered, and which is a splendid work, in a bold, free style that leaves but scant opportunity for fault

A LARGE oil painting of the Yosemite Valley has been noticed at Mayer's during the week. This work, which is of considerably larger size than the pictures usually seen in this locality, was executed by Mr. T. Hill, a California artist, but it is now the property of

the dohile the distance of the whole work is bright and the casual mony and feeling which renders it unsatisty inc. A fault of detail, which, though of very inc. A fault of detail, which, though of very inc. A fault of detail, which, though of very inc. A fault of detail, which while horse in the foreground. We all that may be said for the foreground.

A BOW OF PROMISE

Hangs Over the Business World, Encouraging the Hustlers.

WORK ON CALIFORNIA AVENUE. Cincinnati and Cleveland Ideas Used in

Beautifying Herron Hill.

There was a dearth of new features i local business affairs this week, but the volume of trade was large for the season, and prices were well sustained. Evidences of an unusually large iall movement continue to multiply. The failures in Philadelphia and Richmond had no perceptible effect here. Local securities were fairly active and strong, La Noria and Philadelphia Gas leading, the former with sales on Change of 3,250 shares and the latter of 2.767. The total sales of stocks during the week were 7,000, not counting office and street transactions. Realty was rather quiet in respect of sales, but the inquiry, principally for small houses and building lots, was large and earnest. The number of deeds recorded was 230, involving \$406,472. The business in mortgages showed an improvement over that of the previous week, the number placed and settled being 179, repre-

000. Petroleum was spasmodic and bullish at times, going above the dollar line and tenaciously holding the advance. It was dominated by bearish influences at the close. The West End boulevard, or California avenue, is being pushed through Bellvue as fast as possible. The surveyors yesterday reported rapid progress on that section of the road. It will not only be a public thoroughfare, but an electric road as well, tracks being placed on both sides and a drive in the middle, and it will be paved with block stones or asphaltum. It is already drawing the attention of investors to the district through which it passes and land to the district through which it passes, and land is on the jump. One large and several small tracts changed hands last week at the rate of \$2,000 an acre. ...

Braddock has entirely recovered from the depression caused by the big strike. Banker Kelly says the financial condition of the borough is first class, deposits are large and business active and improving. A large number of handsome dwelling houses are going up between the old town and Copeland, which is filling up very fast with a good class of people.

Wilkins' Hall, the site of which is occupie by the magnificent building of the Fidelity Title and Trust Company, was one of the most famous landmarks of the city. It was built about 1848 by Hon. William Wilkins, who owned a large amount of property is and around Pittsburg. Its first occupant, an East-ern man, kept the finest restaurant ever opened in the city, before or since. In 1851 the first two floors were rented to the city and occupied by Mayor Guthrie and other municipal officers, who remained there until Municipal Hall was ready for occupancy. After that it was used for various purposes. It was razed three or four years ago by Captain Vandegrift, who intended to build on the site, but for some reason he changed his mind and sold the property to the Fidelity Title and Trust Company. old building was the scene of many stirring and memorable events in abolition times and during the war, when it echoed the voices of many of the great orators who moved the peo

Herron Hill promises to become in a very short time one of the most populous residence districts in the city. The demand for building lots there is something extraordinary. The lots are all large, averaging an acre or more in extent, and the building lines are uniform. The streets will be paved with asphalt, and the sidewalks will be constructed on the Cleveland plan—very wide, with plenty of shade trees and grass plots. It is the purpose of the promoters to make the place resemble, so far as possible, the famous Walnut Hills back of Cincinnati. Herron Hill is the highest point of ground in the city, and the views from the summit of hills, valleys and river are magnificent.

The summer duliness made itself felt in the building trade last week, reducing the number of permits to 40, against 67 the week before. The lull is only temporary, and will be followed in a short time by a season of greater activity than any yet experienced. The estimated cost of the 40 buildings is \$86,544. The largest per-mit was taken out by Joseph H. Finch & Co. for seven brick five-story houses, to cost \$23,500. The Exchange National Bank took out a per-mit for an additional story to its present buildmit for an additional fing. It will cost \$11,464.

There is nothing like adapting means to ends, no matter what the business may be. It is a puzzle to some people how railroad conductors can remember people from whom they have collected tickets or received fares, In explanation one of them said yesterday: "It is our business to remember, and if we were to make many breaks our heads would soon come off. Most people manifest annoyance if spoken to oftener than once. My plan differs from those of other conductors, but I find that it works very well. I don't look at the face of a person so much as to the clothing, or some article of jewelry or ornament. Do you see that woman over there with a large pin in her collar? When I collected her fare I looked at that and when I went through the car again I at once recognition. so much as to the clothing, or some article of ized it and knewshe had paid. There is some nized it and knew she had paid. There is some-thing peculiar in the apparel of almost every person, and this serves me as a guide in collect-ing fares. If I depended entirely upon faces, I would make a mess of it and probably lose my

place in a week."

The number of buildings in course of construction in the Wilkinsburg district is 125. All of them will be completed this season. This means an addition of over 600 to the population. Roads have been cut through the woods at the upper part of Edgewood, and ground broken for two fine residences. The emand for building sites there is greater than the supply.

Every man should think well of the business in which he is engaged and endeavor to exalt it as much as in him lies, but sometimes this laudable endeavor is carried to an extreme, as in the case of an East End man who announces that he is "prepared to remove redundant grass in the most artistic style." He plies a lawn

Here is an item that will interest the Pitis. Here is an item that will interest the Pittsburg coal kings. It is excerpted from the Knoxville. Tenn., Journal: "The Tennessee and Ohio Railroad, better known as the Rogersville road, will be extended to Big Stone Gap, Va., at once. This indicates that it will become a part of the East Tennessee system, and is but another step toward making the East Tennessee to the South what the Pennsylvania is to the North—the carrier of coals for the milhon. The distance from Rogersville to Big Stone. cost much less per mile than any of the roads now building in Southwest Virginia toward the coveted iron and coal fields."

NO BOOMS.

Plenty of Bids for Local Stocks With but

The stock market yesterday was featurele and dull except for three issues, and they were not wanted in large blocks. The demand for La Noria was satisfied with 100 shares at 1½. While this price is half a point lower than the best of the week, the stock was not at all pancky. It was offered at 2 at the close, with no disposition to make concessions.

Philadelphia Gas was fractionally stronger at 37%, at which figure 100 shares changed

hands. There were orders for it at \$7%. The Trust stock ruled about the same as the regu-lar. The demand for both was light, indicating iar. The demand for both was light, indicating that the buying movement has about run its dourse for the present.

Of gas stocks in general it may be said that this tendency is downward, and that while there is no likelihood of a material break in any of them, it is quite evident there will be no radical improvement until business picks up in the fail and their earning justify expectations of dividends. The Philadelphia Company is badly handicapped by the certainty of losing a number of milis, all good customers, which will shortly be supplied with gas delivered through private lines.

Central Traction found a purchaser for 30 shares at 30%, the first transaction in it for some time. The others held around the old figures, but were extremely duil. It is the general opinion of brokers and investors that these etocks are too high for the size of the dividends, and that concessions are necessary to make business. They offer greater inducements to investors than to speculators.

There was a great demand for bank and insurance stocks, and the figures were in many cases higher, but there were no transactions. These securities are being absorbed by investors at better prices than speculators can afford to pay. There were no features in the rest of the list demanding special mention. The market closed fairly steady but duil. Hids, offers and sales follow:

EXCHANGE STOCK,

WILKINS HALL A THING OF MEMORY Pitts, Pet., S. and M. Exchange Marine National Bank Mochanica National Bank. M Merchanits & Manufacturers 'N Metropolitan National Bank. Monongaheta National Bank. Monongaheta National Bank. Odd Fellows' Savings Bank. Pittsburg National Bank Comp Pittsburg Bank for Savings. Popple's National Bank Third National Bank
Tradesmeu's National Bank
Union National Bank
Union National Bank
First National Bank, Allegheny
German National, Allegheny
Beal Estate Loan and Trust Co.
Second National Bank, Allegheny
Workingman's Savings, Allegheny senting \$359,056. The largest was for \$40,-INSURANCE STOCKS.

> ers and Merchants'. Bid, Asked. Allegheny Gas Co. (Illum.). Pittsburg Gas Co. (Illum.). Southside Gas Co. (Illum.). NATURAL GAS STOCKS Bridgewater
> Chartlers Valley Gas Co.
> Natural Gas Co. of W. Va.
> Ohio Valley.
> People's Natural Gas Co.
> People's Nat. Gasand Pipeage Co.
> Pennsylvania Gas Co.
> Priniadelphia Co.
> Wheeling Gas Co. OIL COMPANY STOCKS. Forest Oil Co....... Funs Oil Co....... Washington Oil Co... PASSENGER BAILWAY STOCKS.

RAILEOAD STOCKS. Bid. Asked Pittsburg, Youngstown & Ashtabula 30
Pittsburg and Connellsville. 50
Pittsburg a Lake Erie 50
Pittsburg Junction K. R. Co. 57
Pitts, McK. & Yough, R. R. Co. 56
Pitts, Cla. & St. Louis 51
Pitts, Va. & Charieston R. R. Co. 38
Pitts, Va. & Charieston R. R. Co. 125
Pitts. & Western R. R. Co. pref. 20 21 MISCELLANKOUS STOCKS. Ewalt (Forty-third street)...... Monongahela Bridge. Pittsburg & Birmingham Bridge.

Fittsburg & Birmingham Bridge
Charlotte Mining Co.
La Norla Mining Co.
Silverton Mining Co.
Yankee Girl Mining Co.
Yankee Girl Mining Co.
Westinghouse Electric
Monongaheia Water Co.
Union Switch and Signal Co.
Westinghouse Air Brake Co.
Pittsburg Plate Glass Company The sales were 30 shares of Central Traction at 30%, and 100 La Noria at 1%. After call 100 shares of Philadelphia Gas sold at 37%.

A GOOD WEEK

At the Centers Where the Sinews of War Are Disbursed. Business at the banks yesterday, although barren of new features, was satisfactory to the money-handlers. The demand for loans was light, but other lines were well up. Currency and exchange, with a few exceptions, were in and exchange, with a few exceptions, were in sufficient supply, and there was no particular inquiry for either. The week's exchanges were over \$2,000,000 in excess of those of the same time last year. This should convince the most inveterate croaker that the business situation has a silver lining. The Clearing House re-port for the day, week and year is worth study-ing. It is as follows:

Exchanges last week. 12, 475, 688 of
Balances to date, 1889. 20, 484 55
Exchanges to date, 1889. 266, 669, 584 38
Exchanges to date, 1888. 26, 676, 691 00
Gain, 1899 over 1893. 28, 182, 693 38
Money at New York yesterday was easy,
with no loans, and closing at 2% per cent.
Prime mercantile paper, 4,466. Sterling exchange dull and steady at 34 83% for 60-day
bills and \$4 87% for demand.
The weekly statement of the New York
banks, issued yesterday, shows the following
changes: Reserve, decrease, \$165,750; loans, decrease, \$2,569,100; specie, decrease, \$2,188,000;
legal tenders, increase, \$622,660; deposits, decrease, \$5,318,600; circulation, increase, \$13,200.
The banks now hold \$7,069,675 in excess of the 25
per cent rule,

Cleaing Bond Quotations.

U. S. 4a, reg. 128/a M. K. & T. Gen. is 57/4
U. S. 4a, coup 128/a Mutual Union Sa. 100
U. S. 45/s, reg. 108/a Mutual Union Sa. 100
U. S. 45/s, reg. 108/a Mutual Union Sa. 100
U. S. 45/s, reg. 108/a Mutual Union Sa. 100
U. S. 45/s, reg. 108/a Mutual Union Sa. 100
U. S. 45/s, reg. 108/a Northern Pac. 1sts. 117
Pacifics of '96. 118
Louisianastamped 8 88/a Northern Pac. 2ds. 118/d
Misnouri 65. 100
Tenn. new set. 5a. 100
Tenn. new set. 5a. 100
Tenn. new set. 5a. 102
Tenn. new set. 108
Tenn. new s Closing Bond Quotations

LONDON—The bullion withdrawn from the Sank of England on balance to-day is £58,000. PARIS—Three per cent rentes, 837 92346. CHICAGO — Money unchanged; clearings, c 505 000 100. St. Louis-Clearings to-day, \$2,580,166; bal-ances, \$415,158. NOT SO SNAPPY.

Oil Hangs Around the Dollar Line, With Light Trading.

There was very little vim in the oil marke There was very little vim in the oil market yesterday, but while trading was light all round, prices were well sustained, only once during the day failing under the dollar line. When the market touched the lowest point, 95%c, the bears were in clover in anticipation of a bad slump, but at the critical moment Oil City came to the rescue, and by heavy buying put the market on its feet again.

Some careful traders predicted \$1 10 and \$1 15 for certificates this week, while others thought the probabilities favored a lower level. Said one: "It all depends upon the Standard. If the monopoly thinks it has sufficiently punished the shorts there will be a drop, But if it wishes to twist them still harder, it will permit an advance." vance."
The fluctuations were: Opening, \$1 00%; highest, \$1 00%; lowest, \$9%c; closing, \$1 00%. Friday's clearings were \$14,000 barrels. Cash oil was neglected.

Corrected daily by John M. Oakiey & Co., 45 Sixth street, members of the Pittsburg Petro-leum Exchange.

BRADFORD, July 27.—National transit cer-tificates opened at \$1 00%; closed at \$1 00%; high-est, \$1 00%; lowest, \$95%c; clearances, \$22,000 barrels.

barrels.
Titrusville, July 27.—National transit certificates opened at \$1 00%; bighest, \$1 00%; lowest, 20%;c: closed, \$1 00%; bighest, \$1 00%; lowest, 20%;c: closed, \$1 00%. —Petroleum opened firm at \$1 00%, after which it yielded elightly and closed steady at \$1 00%; becck hachange: Opening, \$1 00%; highest, \$1 01%; lowest, 20%;c, closing at \$1 00%. Consolidated Exchange: Opening, \$1 00%; highest, \$1 01%; lowest, 20%;c, closing at \$1 00%. Total sales, 257,000 barrels.

A GOOD PINISH.

The Week in Real Estate Closes With Some Good Sales. ock & Son sold and settled a mort-

I. M. Pennock & Son sold and settled a mortgage for \$5,000, three years, at 6 per cent, no taxes, on a farm in Fayette county; also one on property in the First ward, Allegheny, for \$1,-80, three years, and one of \$500, three years, in Shaler township, both at 6 per cent, no tax.

Ewing & Byers, No. 107 Federal street, Allegheny, sold for William A. Black to Thompson & Thurbron two more lots, being Nos. 1 and 4 in Black & Rohrkaste's plan, Tenth ward, Allegheny, on the line of the Perrysville electric road, fronting on Perrysville avenue, in size 20x220 feet, each running through from street to street; for \$1,450. This makes five lots sold in the above plan in the past two days.

Black & Baird, No. 85 Fourth avenue, sold for the heirs of Andrew Baird to A. Dever a lot on Ward street, Oakland, 125x175 feet, for \$4,500. They also placed a mortgage of \$18,000 for five years at 5 per cent, free of State tax, on a property in East Liberty.

C. Beringer & Son, 103 Fourth avenue, sold for Mrs. Elizabeth A. Drum two acres of land with a frame dwelling, stable and blacksmith shop, near Freeport, for \$000 cash.

Alles & Bailey, 164 Fourth avenue, sold for William Mayes' heirs, No. 106 Devillers street, a brick dwelling of six rooms, etc., lot 20x94 feet, for \$1,400, to George Schmidt.

Samuel W. Black & Co., 29 Fourth avenue, sold for the Blair estate in Glenwood, Twenty-third ward, lots Nos. 145, 146 and 151 on Almeda street, being each 2xx120 to a 20-foot alley, for \$400 each.

W. C. Stewart, No. 114 Fourth avenue, sold for Peter for sea to law of the ward. rage for \$5,000, three years, at 6 per cent, no

street, being each 2ix120 to a 20-foot alley, for \$400 each.
W. C. Stewart, No. 114 Fourth avenue, sold for Peter Lonnes to Lev! DeWolf five acres of land cornering on Shady lane and Homewood avenue, for \$20,000. Mr. DeWolf will have the property at once surveyed and laid out in lots, and will sell them subject to such building restrictions as will make it a very handsome residence quarter.

John F. Baxter sold lots Nos. 342 and 343 in Villa Park plan, frontage of 123 feet on Mohler street by 150 feet to a 20-foot alley, for \$1,200, to Mrs. Matilda Thuma.

THE BUILDING BUSINESS.

Temporary Luli in Operations Preparatory to a Fresh Start.

Summer duliness struck the building trade last week, and the number of permits granted fell off to 40, against 67 the previous week. The depression is only temporary, however, and the season's work has only fairly begun. The following is the list: Mrs. Chalet, three-story brick, 20x68 feet, on Colwell street, between Vine and Miller streets

Eleventh ward. John Rudolph, one frame second story addi-iou, 6x14 feet, on 1839 Sarah street, Twentysixth ward.

Equitable Gas Company, one frame one-story, 12x24 feet, on Smallman street, between Thirty-first and Thirty-second streets, Twelfab

ward.

Mastin, one frame two-story, 27x38 feet, on Craig street, near Center avenue, Fourteenth ward.

ward.

Daniel Hutchinson, one brick two-story, 25x 36 feet, on Sheridan avenue, near Station street, Nineteenth ward.

Daniel Hutchinson, one frame one-half-story, 18x25 feet, on Sheridan avenue, Nineteenth ward. story, 18325 feet, on Shekhala velation, 22r48 teenth ward.

Mrs. W. E. Wylle, one brick two-story, 22r48 feet, on Sheridan avenue, Nineteenth ward.

S. Wheeler, one frame two-story, 18x34 feet, on Artisan street, Twenty-second ward.

Thos. O'Brine, two frame two-story, 18x88 feet each, on Shelby avenue, Twenty-seventh

feet each, on Shelby avenue, Twenty-seventh ward.

Jos. S. Finch & Co., seven brick five-story, 85x149 feet, on Second street, Thirtieth ward.

Mrs. S. A. Core, one frame two-story, 20x24 feet, on Wabash avenue, Thirty-sixth ward.

John McLean, one frame two-story, 18x32 feet on Berg avenue, Twenty-seventh ward.

Wm. Drengwitz, one frame two-story, 20x32 feet, on West & Gray plan, Twenty-seventh ward.

G. F. Yost, one brick two-story, 14x20 feet, 216 Wylie, Eighth ward.

G. H. Lammert, one brick two-story, 20x30 feet, on Porter street, Eleventh ward.

W. H. Berger, one iron-clad, 33x72 feet, on

feet, on Porter street, Eleventh ward.
W. H. Berger, one fron-clad, 33x27 feet, on Railroad street, Twelfth ward.
William Kentock, one frame two-story, 16x28 feet, on Brerston avenue, Thirteenth ward.
William Barber, one frame two-story, 14x28 feet, on Gazzam street, Fourteenth ward.
Z. Wainwright & Co., one frame one-story, 20x45 feet, on Thirty-sixth street, Fifteenth ward.

ward.
Charles Cornfort, one brick two-story, 17x42
feet, on Holmes street, Eighteenth ward.
H. Helen, one frame one and one half-story,
14x19 feet, on Ellsworth avenue, Twentieth

lax19 feet, on Ellsworth avenue, Twentieth ward.

H. Schmidt, one frame one-story, 16x32 feet, on La Force street, Twenty-seven h ward.

M. Schondecker, one frame one-story, 17x32 feet, on St. Paul street, Twenty-seventh ward. George Sweitzer, one frame two-story, 27x42 feet, on Shelby alley, Twenth-seventh ward. George Schmidt, two frame two-story, 20x41 feet, on Cypress street, Twentieth ward.

A. C. Sparigler, two frame two-story, 30x32 feet, on Shakespeare street, Twentieth ward. Barney Carrarigae, one frame two-story, 18x 32 feet, on Grace street, Thirty-second ward.

Albert Manning, one frame one-story addition, 12x14 feet, on 56 Gibbon street, Sixth ward. Mrs. C. McDonald, one brick two-story addition, 20x20 feet, on Locust street, Fourteenth ward.

ward. Hannah P. Smith, one brick two-story and attic, 28x37 feet, on Coarad street, Twentieth attic, 28x37 feet, on Conrad street, Twentieth ward.

J. Lester, one frame two-story, 16x32 feet, on Berg avenue, Twenty-seventh ward.

Anthony Ratage, one frame one-story, 12x14 feet, on 172 Pius street, Twenty-seventh ward.

M. Schlingeman, one frame two-story, 20x30 feet, on Wrights allev, Twenty-sixth ward.

C. Hadock, one brick two-story, 21x52 feet, on Second avenue, Twenty-third ward.

W. G. Grey, one frame two-story, 40x44 feet, on Bates street, Fourteenth ward.

T. Murry, one brick two-story, 21x33 feet, on Forbes street, Fourteenth ward.

A. A Burnett, four frame three-story, 56x17 feet, on Beelen street, Fourteenth ward.

C. Larkins, one frame two-story addition, 12x 16 feet, on Ruther street, Thirteenth ward.

Henry Youngling, one brick two-story, 14x32 feet, on Tustin street, Sixth ward.

Exchange National Bank, one additional story to the present four, 60x30 feet, on Fifth avenue, Third ward.

IN A RUT.

Paralysis in Wall Street-Stocks Dull and Fentureless-London Still Has Con-Adence in Uncle Sam's Securities - Bonds in the Samo Bont.

New York, July 27.—The stock market to-day was in no wise different from that of the preceding day, except in so far as the dullness being greater made it less interesting. The rain kept many brokers away from the floor, and the trading was given over entirely to the and the trading was given over entirely to the professional element outside of the sales of New York Central, supposed to be for foreign account. Considerable pressure was again brought upon Reading, but no effect was produced by the operation. The only movement of importance throughout the session was the further advance of Chicago, Cleveland, Cincinnati and St. Louis common, which, after opening up ½, declined 1 per cent, but later entirely recovered the loss with something in addition, and the unusual strength shown in Chicago Gas. The buying in the latter was set down to Chicago account. Chicago account.

London was again higher this morning, and

our market responded with alight gains, though Rock Island was off % and New York Cen-Rock Island was off % and New York Central %.

The subsequent dealings possessed little interest, but a general recession of small fractions took place in the first half hour, after which the buying assumed greater proportions, and a gradual improvement followed, lasting to the close. The market presented no other feature whatever, and finally closed dull and steady to firm at close to the opening prices.

Railroad bonds showed literally no feature whatever beyond the strength in Ohio, Indiana and Western issues, of which the first rose 4% to 6% and the seconds 2 to 3%. The sales were only \$255,000.

The followine table snows the prices of active stocks on the New York Stock Exchange yesterday. Corrected daily for The Disparcia by Wettners & Stephenson, oldest Pittsburg members of New York Stock Exchange, & Fourth avenue:

Open-ins. Cl., Col., Cin. & L., pew & Cl., Col., Cin. & L., pr. 1984 Am. Colton Oil. Ex Atcn., Top. & S. F.... Ex Canada Southern...... 514

C. & Northwestern, C. & Northwestern, C. & Northwestern, p. C. C. C. C. E. I. Col. Cost & Iron, Col. & Hocking Vai Del. L. & W. Del. & Hudson. 78% 143 ei. & Hudson. en ver & Hio G., pr... T., Va. & Ga. ist pf. T., Va. & Ga. 2d pf. Missouri Facific.

New York Central. 10

N. Y. L. E. & W. 2

N. Y. C. & St. L. pf.

N. Y. Western.

Norfolk & Western.

Norfolk & Western.

Northern Pacific over.

Ohio & Mississippi.

Oregon improvement.

Oregon improvement.

Oregon Transcom.

Pacific Maili

Pec. Dec. & Evans. 27 14 63 % 43% "Ex-dividend. Movements of Specia

Naw York, July 27.—The exports of specie from the port of New York last week amounted to \$88,544, of which \$278,630 was in gold and 10 \$86,074, of which \$270,050 was in gold and \$006,914 silver. Of the total exports, \$275,710 in gold and \$606,614 in silver went to Europe, and \$2,820 in gold and \$500 in silver went to South America. The imports of specie for the week amounted to \$817,669, of which \$590,278 was in gold and \$26,791 silver.

Besten Steeks.

Aich. & Top. R. H. 253; Calumet & Heels.
Boston & Albany. 216
Boston & Maine. 201
C. B. & G. 295;
Eastern R. R. 100
Franklin.

Pastern R. R. 516; Pewable (new).

Mex.C. Ist mig. bds. 654
Mex.C. Ist mig. bds. 654
Mex.C. Ist mig. bds. 654
Mex.C. List mig. bds. 654
Mex.C. Top. 125
N. Y. & N. E. 7. 129
Uid Colony. 175
Rutiand preferred. 49
Mis. Central, com. 22
AlloueziigCo(new). 30 Boston Stocks. Philadelphia Stocks.

Closing quotations of Philadelphia stocks, fur-nished by Whitney & Stepheuson, brokers, No. 37 Fourth avenue. Members New York Stock Ex-change. Pennsylvania Railroad..... Reading Lehigh Valley.... Lehigh Navigation Northern Pacific Northern Pacific preferred

LIVE STOCK MARKETS. The Condition of Business at the East Liberty Stock Yards.

OFTICE OF PITTSBURG DISPATCH. } CATTLE-Receipts, 640 head; shipment sead; market fair at unchanged prices; CATTLE—Receipts, 640 head; shipments, 600 head; market fair at unchanged prices; 3 cars of cattle shipped to New York to-day.

Hogs—Receipts, 2,100 nead; shipments, 2,000 head; market fair; light Yorkers, \$4 85@4 90; medium and light Philadelphias, \$4 75; heavy, \$4 30@4 50; 5 cars of hogs shipped to New York to-day.

SHEEF—Receipts, 1,800 head; shipments, 1,400 head; market fair at unchanged prices

Chicago Grain Market.

CHICAGO—The weather was hot and muggy nere to-day, and during most of the session the usual Saturday's quietness prevailed in the wheat pit. Trade was enlivened by the filling of some New York buying orders and pos sibly some for foreign account, but local sen-timent was not sufficiently pronounced in favor of either the bull or the bear side of wheat to create any enthusiasm or competitive bidding Upon the whole the feeling was one of weak ness all the morning, and early trading was at prices fractionally below yesterday's closing range.

Apprehensions of a squeeze in July property

were still further allayed by a sag in the price from 80½ at the opening to 75½ c, and although a rally to about the opening price quickly fol-lowed this break, it is not believed that enough of a short interest exists in July to be worth mentioning. New export business in New York was variously estimated at from 15 to 22 boatloads, and the news caused the market here to firm up ½c or so, but there was a drag-ging traited during the last half of the respice and

SECRET SOCIETIES.

Golden Chain. -Past Supreme Archon John W. Cruett, of the Improved Order of Heptasophs, is a mem-ber of the order of the Golden Chain.

-Duquesne Lodge No. 90, of this cirv, in itiated Dr. Harry Bullen on last Thursday night. Four candidates are to be initiated at he next meeting. —The largest lodge of the Golden Chain is in Baltimore, it has 431 members. There are 21 lodges with a combined membership of nearly 4,000 in Baltimore.

—Deputy Supreme Commander Samuel I. Osmond, will institute a big lodge with a select charter list, in this city, this week. Many vis-itors from other lodges will be present to as-sist in the ceremonies. -Captains A. C. Shaw and S. P. Woodside, of Duquesne Lodge, are contesting for a solid gold and diamond studded badge, offered by the lodge, to the captain of the team proposing the greatest number of acceptable candidates by January I, 1890.

January I, 1890.

—The third annual basket picnic of Allegheny Lodge will be held at Avalon station, P., F. W. & C. R. R., on Thursday, August S. C. D. Grupen, M. C. Bryant, H. S. Oliver, H. J. Mitchell and A. S. Smith are the Committee of Arrangements. All the lodges in the county have been invited.

The Heptasophs. Nearly all the Allegheny County Conclave lave organized contesting teams. -The new constitutions are now ready, and ill requisitions must be sent to the Supreme

-Thomas V. Kessler, Supreme Commander, and W. H. Sadler, Supreme Treasurer of the Golden Chain, are both members of Maryland Conclave of I. O. H., of Haltimore.

—Pittsburg Conclave No. 89 is now the larges conclave of the I. O. H. It has about 310 mem bers. The next largest conclave is Zeta Con clave, of Baltimore, with 255 members. clave, of Battimore, with 200 memoria.

—Friendship Conclave, of this city, has been honored with the appointment of Brother Trent and Langütt on the Supreme Committee on Law, and Brother C. C. Cornelius being elected a District Deputy Supreme Archon. —The Supreme Archon yesterday handed to officers of Industry Conclave No. St, a warrant for £2,000, payable to Rebecca Williams, widow of Huehard D. Williams; also a warrant to the officers of West End Conclave No. 77, for £2,000, payable to Barbara Buch, widow of J. H. E. Buch. These members died recently, and their beneficiaries have been promptly paid.

-Brother Kelland will go to the Grand Lodge in August from Great Western. —Lorena Lodge has a membership of nearly 250. This is remarkable for so young a lodge. -Brother J. M. Cook, of Fort Duquesne, as Secretary of the Reunion Picnic Committee, has sent out 150 circulars telling of the coming event. -Arrangements are about complete for the grand reunion of the order at Aliquippa Grove August 10. This will be the first general gathering of the organization in this part of the state.

Knights of Pythias.

A. O. K. M. C.

—Captain W. D. Low has been recently elected Colonel of the First Regiment Military branch, A. O. K. M. C., State of Pannsylvania.

—The members of S. I. Holmes Commandery No. 10, A. O. K. M. C., refected great credit on their organization Friday, July 25, the occasion being their third annual picnic, which was held at Silver Lake Grove. The affair was strictly select, 500 invitations having been issued to ladies, over 700 tickets sold. Quite a number of Supreme and Select Castle Past Officers were present, also representatives from every uniform rank in the county and the majority of the castles. The principal decorations this year were six large silk flags and a number of pentagons and shields with the motto of the castle thereon.

Jr. O. U. A. M.

evening, was a successful affair. The hall was neatly decorated with plants, flowers and the national colors. The flag presented to the council by the ladies on the hill was presented by B. U. Trent, Esq., in an appropriate address, and it was received by H. I. Gourley. The solid bronze emblem and gavel block donated by George Crawford were presented by State Vice Councillor Stephen Collins, and were received by James W. McCleary. UNABLE TO REMAIN.

At the last meeting of the independent auxilary to the Sons of Veterans the following officers were installed for the term of six mouths: President, Mrs. J. Brooks: Vice President, Mrs. M. Holly; Treasurer, Mrs. R. Bostwich; Secretary, Mrs. A. McDermott; Chaplain, Miss M. Holly: Usher, Miss E. Graham; Inside Sentinel, Mrs. H. Wagner: Outside Sentinel, Mrs. M. MaGann. The retiring president, Mrs. A. Alker, was presented with a very fine plush reclining chair as a token of appracriation of her services. A. O. U. W. The first annual lawn fete of the First Regiment, Select Knights, A. O. U. W., will be given at Silver Lake Grove next Friday from 2 to 11 o'clock P. M. A programme will be issued which will include the Lewis Quartet, Mrs. Foster, C. V. Lewis, a concert by the Select Knights Band and other entertaining features.

Royal Arcanam Grand Reneut Joseph A. Langlitt has ap-pointed Past Regent James A. Benton, of Iron City Council, District Deputy Grand Regent with councils Ravenna, Orion and West. End under his supervision.

AN ORANGE TRUST.

Capitalists and Fruit Growers Combining Control the Market and Regulate Prices-Outline of the Plans for Shipment and Control of the Supply.

NEW YORK, July 27 .- A meeting of

vholesale fruit merchants, who are interested in the disposition of the Florida orange crop, will be held in this city on August 1. crop, will be held in this city on August 1.

Leading dealers in oranges from the principal cities throughout the country will attend or have representatives present. The object of the meeting is ostensibly the combination of the large houses in the trade for the purpose of obtaining lower rates of freight, quicker and better transportation and the concentration of shipments to two or three of the most important. Northern and the concentration of shipments to two
or three of the most important Northern
eities. The real object is to form an Orange
Trust, which will control the entire Florida
orange crop, direct the packing and shipping and confine the sale of the oranges to
the members of the trust. Last February a
New York evening paper said that steps
were being taken to form this combination
and that matter is now in a fair way of

and that matter is now in a fair way of being carried through.

The call for the meeting was sent by one of the largest dealers in Florida oranges in of the largest dealers in Florida oranges in this city, and several wealthy firms are said to be ready to furnish the financial backing that will be necessary. It is proposed to form a pool of 100 leading fruit merchants and capitalists, each one of whom is to contribute \$10,000. This will make a total capital of \$1,000,000. With this amount packing houses are to be built at different points in Florida, and the whole business of sorting, packing and shipping the fruit will be conducted. The entire orange crop of Florida is to be contracted for and shipped to the members of the pool in New York, Boston, Chicago, St. Louis, Bultimore, Philadelphia, New Orleans and possibly other cities.

is not a trust, but that it is a co-operative arrangement for the benefit of owners, ship-pers and sellers. The growers will be asked sign contracts disposing of their crop on the trees at the uniform rate of \$1 a box for five years. The fruit will be sold at auction to the trade. All private sales will be stopped and the demand for the fruit will regulate the price.

When baby was sick, we gave her Castoria, When she was a Child, she cried for Castoria, When she became Miss, she clung to Castoria, When she had Children, she gave them Castoria

209-77-MWFSQ

\$375,000 5 per cent First Mortgage Bonds. Free of All Taxes.

The Central Traction Company, of Pittsburg, offers for sale its total issue of Three Hundred and Seventy-five Thousand Dollars, first mortgage five per cent bonds due 1929. Bonds are for \$500 each, interest payable semi-annually, are free of all taxes and a first lien on all the property and franchises of the company, whose cable road will be com-pleted by October 1.

Proposals for all or any part of these bonds will be received by the Treasurer of the company up to and including July 31, and allotments made thereunde At 104.46 these bonds pay 434 per cent annually, at 109.24, 43/2 per cent, at 114.37. 4% per cent and at 119.87, 4 per cent. The Company reserves the right to

reject any or all offers. For further information, address F. L. STEPHENSON, Treas., The Central Traction Company,

Pittsburg, Pa. BROKERS-FINANCIAL. WHITNEY & STEPHENSON.

57 FOURTH AVENUE.
Issue travelers' credits through Mesers. Drexel,
Morgan & Co., New York. Passports procured.
ap28-1

COMMISSION, Railroad Mining OIL 16 BOUGHT AND SOLD For cash or on margin, Sau Francisco, Philadelphia or Boston Exchanges. Loans made at low rates of interest, Established 1876. 42-Weekly Circular FREE, A. R. CHISHOLM & CO., 61 Broadway, N. Y. mhl3-97-su

Fidelity Title and Trust Co. Will remove to its new building. 121 AND 123 FOURTH AVE. Monday, July 29. Safe deposit department will be open for busi-ness on

Thursday, August 1. Boxes to rent from \$5 per year upward. Se-section of boxes may be made on and after When the vault and parlors may be seen,

JOHN M. OAKLEY & CO.,

BANKERS AND BROKERS. Members Chicago Board of Trade and Pittsburg Petroleum Exchange. 45 SIXTH ST., Pittsburg.

BIALTO BUILDING, Chicago.

"I have lived in this city for a long

time," said Mr. Creahan, "and have a large circle of acquaintances both in Pittsburg and Allegheny. Up to about three or four years ago, as any of my friends can attest, I was as hale and hearty a man as you could find in the State. At that time I caught a severe cold. After a while it seemed to leave me; but whether it was not entirely well, or I had contracted fresh colds, I do

A Machinist Who Was Compelled to

Leave at Last

COMPLETE AND PERMANENT.

stopped up, my throat raw and uncomforta-ble, and I had a continual backing cough." The gentleman in question is Mr. James Creahan, No. 41 Mulberry street, Allegheny. He is a machinist, and has been engaged for some time at Lindsay & Me-Cutcheon's machine shops, at the foot of Ridge avenue, Allegheny. Previous to his engaging with them he was with the Westinghouse Company.

not know. At any rate, my head became

"The trouble at first," he continued, 'seemed trifling, and I paid no attention to it, but it steadily grew worse. My nostrils would clog up, and sometimes when I used my handkerchief to clear them, my nose would commence to bleed. My throat got worse, and it was a painful operation for me to swallow my food. My eyes would fill with water and were so weak and inflamed that I could scarcely see. There was a buzzing noise in my ears and after a while I began to have severe pains there. My head sched continually, feeling as if someone had a steel band tightened around it.

"This continued for at least two years, when I found that the trouble was more rapidly extending. I first noticed this in a pain around my heart and in my groin. The former was the more severe. It would come on suddenly, completely prostrating me for a time. Indeed, only about two months ago I had an attack that nearly caused my death. In addition to these pains, I had palpitation of the heart. It would be followed by a slow, irregular beat-

ing, and a feeling of faintness.
"I slept well enough, but it did me no good. I would feel more tired in the morning than when I went to bed. My throat at this time would get choked up, and I could feel the mucous dripping back into it.



Mr. James Creahan, 41 Mulberry Street

"I would keep hawking and spitting coninually. There was always something there that I could neither get up nor down. I could never eat in the mornings. I had to force my food down, and what little I did on my stomach. I would often have a nauseating feeling, with an inclination to vomit. I tried all the remedies that were recommended to me, and was under a phy-sician's care. But I grew steadily worse, and finally had to lay off from work.

"About this time I read a case in one of the newspapers that was similar to mine, which Doctors Copeland & Blair had treated successfully. I went to them, and, finding their charges reasonable and within my means, placed myself under their care.
"I soon began to feel better. The soreness

"I soon began to feel better. The soreness in my throat, pains in my ears and headache all left me. My eyes ceased to be watery and no longer troubled me. The pain around my heart, which caused me so much suffering and anxiety, has entirely disappeared. I arise in the morning feeling perfectly rested. I have a good appetite and enjoy my meals. Indeed, I feel like a new man. It was not by any means a temporary improvement. I continued to get stronger and better until the last trace of my trouble passed away. There is not a trace of it left now. I am as well as I was four years ago, and feel grateful to Drs. Copeland & Blair for my complete recovery."

Mr. Creahan resides, as stated, at No. 41 Mulberry street, Allegheny, and his statement can be easily verified.

VERY PLAIN TALK, Showing the Outline of a Route Which is Often Followed. When a person with a delicate constitu-

tion has a tendency to catarrh or consumption-whether this tendency is inherited or results from taking cold easily-it is noticeable that that person invariably loses flesh and loses strength, showing that the nutrition is interfered with. In such a case the sufferer should at once be placed under influences that will restore the defective nutrition and tend to invigorate the

constitution.

It is to be remembered in every case the pres-

It is to be remembered in every case the presence of catarrh is an evidence of predisposition to consumption, and no matter how slight the attack may be, it should be treated with the greatest care and the treatment should be continued until all traces of the catarrh have dis appeared.

If the catarrh is allowed to reach the smallest tubes in the lungs—which condition is indicated by the spitting up of a yellow material then immediate attention to the malady is demanded, or serious lung trouble will result.

Catarrh is, nine times out of ten, the cause that produces consumption, and hence no one can afford to neglect a case of catarrh, however slight. It is easily cared, if taken in time and treated regularly and correctly by a specialist. If left to itself it is rarely oured without a change of climate, but with each new cold it gets more and more troublesome, extending always a little deeper into the lungs until a cure becomes difficult and sometimes impossible.

"I should like to be treated," a lady remarked the other day, "but I would not like to have my name in the paper." Let it be stated that Drs. Copeland and Blair never publish a name or statement without the full and free consent of the patient, nor do they publish one hundredth part of the testimonials, letters and statements received by them from grateful patients. As observed, the statements green are entirely voluntary, and are given by the patients for publication. Drs. Copeland and Blair would never publish the most emphatic testimonials unless the patient giving it understood that it was to be printed and gave willing consent.

DOCTORS

66 SIXTH AVENUE,

tion, \$1 00. Address all mail to DES. COPELAND & BLAIR & Sixth ave., Pittsb